GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:1884
ANSWERED ON:09.03.2016
North East Centre for Technology Application and Research
Jena Shri Rabindra Kumar

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government has taken adequate initiative for the implementation of the North East Centre for Technology Application and Research (NECTAR);

(b) if so, the details thereof;

(c) if not, the reasons therefor;

(d) the details of ongoing projects under the above centre; and

(e) the targets set and the achievements made so far?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY
(DR. HARSH VARDHAN)

(a) & (b): Yes, Madam. The North East Centre for Technology Application and Reach (NECTAR) was set up as an autonomous society under Department of Science and Technology in 2012 with the objective to provide technology assistance and technology-assisted decision support systems and to focus on enhancing Technology Reach to the States in the North-Eastern region. The apex body of NECTAR is the Governing Council which comprises Secretary, Department of Science & Technology (DST) as the Chairman and the Chief Secretaries of the seven North Eastern States and the state of Sikkim. Director General, NECTAR is the member-Secretary of the Governing Council of NECTAR. Secretary, Ministry of Development of North Eastern Region has been co-opted as a member of the Governing Council. The Government of Meghalaya has also allotted 5 acres of land for setting up the office of NECTAR in the New Shillong area. With financial assistance from the Government of India and also from the State Governments, the Centre has developed and showcased many appropriate technologies for the region and proved their efficacy in real life. The Cabinet approved the merger of National Mission on Bamboo Applications (NMBA) and Mission for Geo Spatial Applications (MGA) along with their assets and liabilities into the Centre. The talent pool available with these missions helped kick start the activities of NECTAR.

(c) Does not arise.

(d) & (e): In order to assist the North-Eastern region of the country, NECTAR is ensuring applications of appropriate technologies for development in the areas of biodiversity, watershed management, telemedicine, horticulture, infrastructure planning and development, planning and monitoring, tele-schooling using cutting edge MESHNET solutions, employment generation, etc. through utilization of local products/resources and resulting in associated skill development. The Centre also aims at harnessing and developing technologies available with the central scientific departments and institutions.

Targets set by NECTAR consist of projects in the following areas:

? Projects that secure safety and security of people;

â€¢ Projects that contribute to Urban Management and Urban Civic Services (CCTV based surveillance systems/traffic management technology), Radio networks, 3-D terrain models, etc.;
â€¢ Projects that enable critical, reliable communication at high bandwidth and employing high speeds (Tele-medicine and E-education meshnets).
â€¢ Projects that enable mapping of scarce and critical natural resources like water, forests, public utilities, etc. using 3-D GIS platform at a very high resolution;
â€¢ Wide-ranging training and technology projects in areas of bamboo applications across the entire value chain from bamboo growth, primary processing to modern applications and products;
â€¢ Income and livelihood programmes in agriculture, horticulture and agri-processing;
â€¢ Training and skills development programmes in rural and backward regions.

NECTAR has, in the last three years, developed and implemented a large number of such technology projects. The achievements, in

brief, are as follows:

Software Defined Radios (SDR):

SDR project for state-of-art communication facilities for security and safety of the people and for developmental purposes, including for secure and critical disaster management information system. Natural disasters, such as landslides, earthquakes etc. require alternate communication network, which usually require high power and high infrastructure. NECTAR has put up a communication network using SDRs which meets the needs and requirements with low power and low infrastructures.

? Achievements:

â€¢ Nagaland : On the request of Nagaland Disaster Management Authority, High Frequency radio communication system network has been designed to connect the Deputy Commissioners with the Disaster Management Authority. All eleven districts were connected with the State Disaster Management Authority.
â€¢ Sikkim: NECTAR has put up a small demonstrator network using SDRs, which meets the needs and requirements of Government of Sikkim.
â€¢ Arunachal Pradesh: NECTAR has installed a fail-safe communication network for the State Police Department. Seventy two static SDRs have been installed, linking the police stations with the headquarter. This network allows email, voice and data transfer and broadcast facilities. There is seamless network connectivity from Zimethang on the Chinese border to Vijay Nagar on the Burmese border.
â€¢
Wireless Meshnet projects for CCTV based monitoring and surveillance

? Achievements:

â€¢ Guwahati: Mesh network has been established at number of locations with pan-tilt and zoom and fixed lens camera. In the control room set up, streaming data is overseen by a team trained by NECTAR with capacity to tilt, zoom or point the cameras as per requirement. Ample data storage has been provided for control room for revisiting the footage for analysis. The quality of output is high definition, color footage with excellent resolution during night time using infra red bands. The speed of the network nodes varies from 150-200 mbps.
â€¢ Shillong and Tura: In Shillong 120 numbers of cameras have been installed of which 30 numbers are PTZ cameras and 90 are veri-focal full High Definition bullet cameras. In Tura, 14 PTZ cameras and 45 bullet cameras have been installed. The advantage of this storage equipment is that stored data can be analyzed on the fly. The average through put in the system is 150-180 mbps, providing sufficient band width to have streaming data with a clear picture.

Telemedicine Project:

? Achievements

â€¢ Tura : Seven Primary Health Centres have been connected with the district and maternity hospital to have remote examination of patients by specialists.
â€¢ Nagaland: As a part of societal applications, nodes for telemedicine system have been done in Nagaland.

Geographical Information System (GIS) platform for Meghalaya and Nagaland

? Achievements
â€¢ Meghalaya: NECTAR in full-fledged partnership with Meghalaya Basin Development Authority (MBDA) has developed a model GIS centre for understanding the water flows in the Meghalaya Rivers. The GIS platform developed by NECTAR has been used to identify the water sheds of 26 rivers which flow either into the Brahmaputra or into Bangladesh.
â€¢ Nagaland: NECTAR also working with Government of Nagaland for development of GIS platform in the State.

Income and Livelihood Programmes and Skill Development:

? Achievement

â€¢ NECTAR is working with Self Help Groups (SHGs) for growth and development of agarbatti industry, primarily dependent on bamboo sticks originating from the North East. NECTAR aims at bridging the gap between producer groups and consumer. NECTAR has connected with SHGs in Meghalaya who are actively involved in producing and processing of Cherrapunji honey, black pepper and turmeric. Lakadong turmeric is known to be high in curcumin content, which increases the medicinal benefits (of turmeric). This also ensures better returns to the farmers.
â€¢ NECTAR is working towards upgradation of livelihood of North East farmers. Crops like turmeric will be utilized for curcumin extraction, which will provide better returns.
Support for women in Manipur for weaving activity

? Achievement

The North Eastern Region in home to 45 million people belonging to 272 ethnic groups. However, many lives are lost due to violence in the states, especially Manipur. For economic empowerment and livelihood possibilities for vulnerable women in Manipur, NECTAR has supported them for weaving activity. Thousands of women and more than 300 villages are covered under this program and over 1000 women are getting financial assistance for small scale entrepreneurial work. Women are involved in work of weaving, silk reeling, bamboo crafts manufacturing etc.

Strategic Business Plan Development for Bamboo Industry in India

? Achievement

â€¢ NECTAR has supported installation of six bamboo-based quick erect shelters and nine barracks for surrendered militants on the request of Meghalaya Government.
â€¢ On the request of Arunachal Pradesh Police, sixteen bamboo barracks have been completed and handed over.

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